102(b)

21632-P001US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Maudlin.	§	Before the Examiner: Reagan, James A.
Serial No.: 09/450,308	§	Group Art Unit: 3621
Filed: November 29, 1999	§	
Title: MAUDLIN-VICKERY AUCTION METHOD AND SYSTEM FOR MAXIMIZING SELLER REVENUE AND PROFIT	§	

DECLARATION OF STUART C. MAUDLIN
UNDER 37 C.F.R. §1.131

1. My name is Stuart C. Maudlin. I am the inventor of the application filed November 29, 1999 entitled "Maudlin-Vickery Auction Method and System for Maximizing Seller Revenue and Profit" under Serial Number 09/450,308 (the "Application"). I am more than twenty one (21) years of age and fully competent to make this declaration.

2. I incorporate by reference statements made in my prior Declaration in support of the present Application, dated October 30, 2002.

3. My conception of the invention disclosed in the instant application was completed at least as of December 7, 1998. On that date, an article detailing the substance of my presentation to the Federal Energy Regulatory Commission on December 1, 1998 was published in Natural Gas Week. A true and correct copy of pages 5-6 of Natural Gas Week, vol. 14, n. 49, containing the article is attached hereto as Exhibit "C".

4. The Natural Gas Week article describes many claimed features of the disclosed Vickrey auction, as presented by myself, including market-based setting of the reserve price, acceptance of the submission of at-market bids, and revenue maximization for the seller.

5. All statements made in this declaration made of my own knowledge are true and all statements made on information and belief are believed to be true.

6. I acknowledge that willful false statements and the like are punishable by fine or imprisonment or both (18 U.S.C. § 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Dated this the 17th day of June, 2003.

STUART C. MAUDLIN

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21632-P001US 06/17/2003

Natural Gas Week

VOLUME 14, NUMBER 49 DECEMBER 7, 1998

Late News...

Global coup. International Energy Agency (IEA) reiterates that barring implementation of new environmental policies to restrict carbon emissions, global natural gas demand will grow by 2.6% annually through 2020. If new policies are put in place, growth could be even greater.

* * *

Takes one to know... Phillip R. Sharp, who headed up Energy Department's Electricity Reliability Task Force, tells conference in Annapolis, Md., that only in Washington "would they put a politician anywhere near something called reliability." A former Democratic congressman from Indiana, Sharp now lectures at Harvard.

* * *

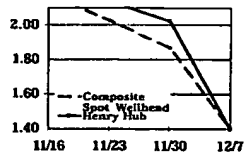
He's baaaack. Newly appointed GOPers on the panel recommend Sen. Frank H. Murkowski be chosen for third term as chairman of Senate Energy and Natural Resources Committee. Nod must be ratified by Republican Conference next month. New lawmakers added to panel — Jim Bunning, R-Ky.; Peter G. Fitzgerald, R-Ill.; Evan Bayh, D-Ind.; and Blanche Lambert Lincoln, D-Ark.

* * *

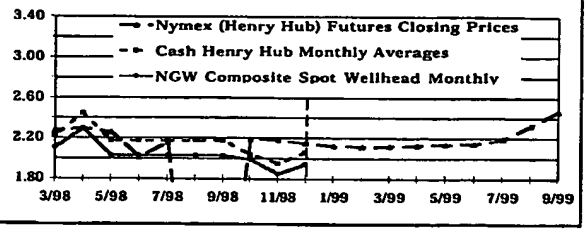
Fat chance. Branko Terzic, former member of FERC and ex-CEO of Yankee Energy Services, says of FERC proposals to liberalize secondary market at Washington conference: "I think you have a better chance of estimating rates in a market dynamic than you have of estimating what a future FERC would do."

* * *

Average Cash Prices & Futures Strip



Prices declined drastically following a stronger-than-November bid-week, and a continued soft market is expected this week.



Henry Hub Gas Falls Below $1 As Producers Hope for Frost

With every near-term factor in the natural gas market currently bearish — including plummeting oil prices quashing most opportunities for fuel switching to gas — producers now must pin all hope for rising prices on some sustained and seasonal winter weather arriving soon.

A number of bearish factors have converged. Mild weather, a large surplus of working gas in storage as compared to years past, pipelines restricting flows onto their systems due to bloated linepacks (see story, p.3), and the prospect for further increases in the storage surplus have brought about comparisons to the winter of 1994-95 when a similar situa-

(continued on page 2)

Gas-Thirsty Southeast States Wait for New Pipeline Projects

While Florida is poised for an imminent boom in natural gas demand, the rest of the U.S. Southeast — with its burgeoning populations and fast-rising economies — may not be far behind in developing new gas markets.

Reacting to likely gas supply constraints in the state, the Williams Companies Inc.'s TransContinental Gas Pipe Line Corp. (Transco) is developing a new Florida pipeline system, dubbed the Buccaneer Pipeline (see story, p.16). Industry sources have speculated that the line would need around 500 MMcfd of capacity to be feasible (NGW, 10-26-98, p.5).

Florida Gas Transmission Co. (FGT) — which controls

(continued on page 8)

Pairing of 2 Big Oil Companies Also Forms Global Gas Gorilla

The pending $75 billion merger of Exxon Corp. and Mobil Corp. has generated a spate of superlatives in describing its magnitude, but somewhat overlooked so far is where the new combination ranks in the global hierarchy of natural gas players.

Mobil already is big, with global gas reserves of 17 Tcf. Exxon is gargantuan, holding some 42 Tcf. Together they create the largest privately owned gas company in the world and the only nongovernment-owned company among the top 15 reserves owners.

Already, both are major participants in North America,

(continued on page 18)

(continued from page 4)
complete almost 1,000 new gas and oil wells in the Gulf next year just to maintain present production levels. By 2001, the number of successful completions needed will escalate to more than 1,150, Pursell said.

By comparison, the industry has averaged about 940 successful completions in the Gulf each year during the 1990s, officials said.

U.S. gas demand has grown at an annual rate of 2% since 1989. "On a base demand of approximately 58 Bcfd, this equates to over 1 Bcfd of additional natural gas productive capacity every year to meet growing demand," said Simmons officials.

The additional gas supplies required both to satisfy growing demand and to offset the escalating depletion of Gulf shelf reserves will likely have to come from deep-water and subsalt operations in the Gulf or from western Canada, they said.

Dayrates for jackup rigs in the Gulf have tumbled to the low $20,000s from a peak of $70,000 earlier this year. The number of jackups stacked in the Gulf has jumped to 25 from zero in six months, while rig utilization in those waters tumbled to 76% from 97% previously.

—Sam Fletcher

Vickrey Auction Plan Advanced As Framework for Gas Pipelines

Most people have never heard of the Vickrey auction model, but it's being floated as a way to set the reserve, or floor, price for short-term capacity on natural gas pipelines.

In a meeting last week with staff members of the Federal Energy Regulatory Commission (FERC), a proposal was advanced by Stuart C. Maudlin, president of Sabre Energy Network, that addressed setting reserve prices — the main sticking point of the short-term capacity Notice of Proposed Rulemaking (NOPR) (NGW, 8-3-98, p.4).

Since the NOPR was issued earlier this year, concern has been widespread regarding the setting of a reserve price, especially in low-demand periods. Would regulators or pipeline companies set the reserve price? Or is there some other mechanism that can set the price?

Under the Vickrey — named for William Vickrey, Nobel Prize-winning economist in 1996 — auction model, which is more commonly known as the uniform second-price auction, bids are sealed and each bidder is unaware of the other bids. In the case of short-term capacity auctions, Maudlin proposes selling all capacity at the lowest winning bidder price until all available capacity is sold, or until the next lower bid, if awarded, would lower the total value of capacity sold.

For example, in a low-demand period a shipper may bid 10¢/Mcf to ship 100 Mcf of gas, worth $10. A second bid for 9¢/Mcf to ship 100 Mcf would push the reserve price value to $18 (100 Mcf + 100 Mcf * 9¢).

The next bid for 5¢/Mcf to ship 100 Mcf would be rejected, however, as its value of $15 (100 Mcf + 100 Mcf + 100 Mcf * 5¢) falls below the previous bid. The reserve price would thus be 9¢/Mcf.

All bidders would pay the same rate for the same capacity, and no bidder pays more than its "reserve" ceiling. Under this approach, bidders also avoid the "winner's curse" — paying more for the capacity than its value.

FERC's NOPR has come under fire from many sectors of the natural gas industry. For short-term capacity — defined as terms of two days to one year — the market would bid on a shipping price. But the pipeline would not be required to accept any bid below the reserve price, thus setting a price floor with no price ceiling, to the shipper's detriment.

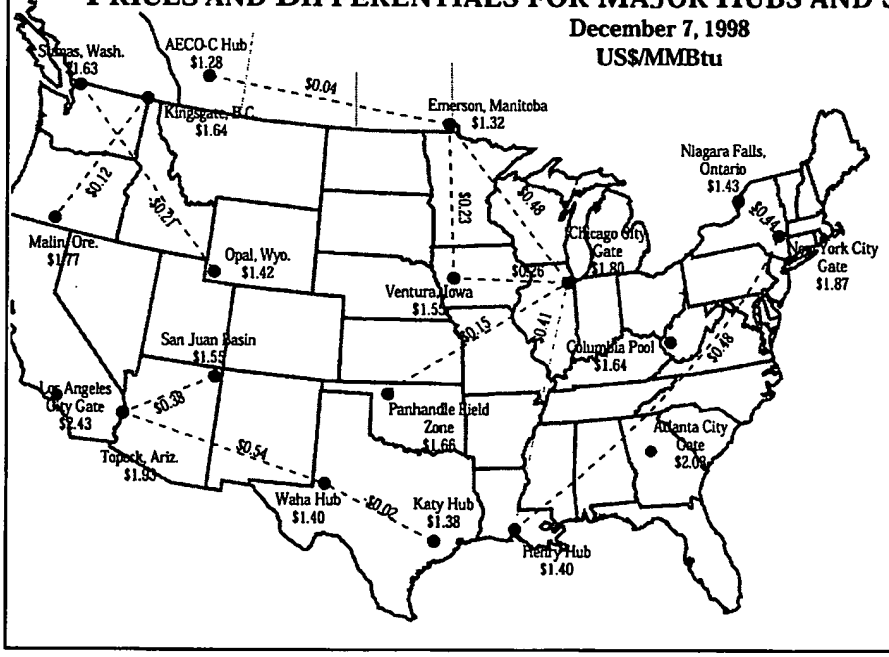
Under the proposed daily auctions, however, FERC would

(continued on page 6)

PRICES AND DIFFERENTIALS FOR MAJOR HUBS AND SELECTED CITY GATES

December 7, 1998

US$/MMBtu



NOTES:

(1) Sumas, Wash.; Kingsgate, B.C.; Emerson, Manitoba; and Niagara Falls, Ontario, are reported as major import points from Canada.

(2) City Gate represents the cost of gas at the point at which the city's local distribution company takes title to the gas, except in Los Angeles where end-users take title to gas delivered on Southern California Gas Co.'s extensive, interstate pipeline-sized distribution system, which reaches eastward, for example, to the state border with Arizona (at Topock, Ariz.).

(3) Malin, Ore., is the point at which Pacific Gas Transmission Co. delivers gas into Pacific Gas & Electric Co.'s Line 400.

(4) All prices are volume-weighted.

(5) Differentials reflect the price difference between the two points, and could be used to represent pipeline transportation costs.

Vickrey...

(continued from page 5)

not mandate a reserve price. This facet has pipelines on edge, as there would be no price floor during low-demand periods.

Maudlin's idea would go one step further than FERC's proposal, using the uniform second-price auction to set the reserve price in both short-term and daily capacity auctions. The reserve price calculation sets the floor price, he said.

Built into Maudlin's uniform second-price auction is a mechanism for those who must have capacity to get it. Bidders would be permitted to submit at-market bids, he said.

Any auction result is distorted if buyers collude, Maudlin said. If all parties agree to "low-ball bid," he added, the results are skewed. However, under the uniform second-price auction model, if any one of the parties deviates, the others lose out and may not get capacity at all.

Because the market — not the pipeline companies — would set the reserve price, the proposal also addresses FERC's concern that pipeline companies would keep capacity off the market by setting an unrealistic reserve price, Maudlin said.

Of the groups affected by the auction process, Maudlin said, "I think the pipes will look at this with appropriately skeptical eyes."

Greg Lander, president of TransCapacity, said the auction proposal seems to respond to the pipeline companies' desire to maximize revenue, and it also addresses FERC's and the market's desire not to pay more than necessary to get capacity.

However, he said there are issues within the proposal that need to be addressed. For example, he asked, what if all bidders submit at-market bids? "Will [the proposal] hold up to the rigors of the what ifs?"

FERC has scheduled a technical conference on the auction proposal for Dec. 8 in Washington. Initial comments on the NOPR are due Jan. 22, 1999.

—Jeff Gosmano

Coalbed Methane Production Up; Low Oil Prices Spur Interest

When Wyoming Interstate Company Ltd. (WIC) filed last week with the Federal Energy Regulatory Commission for approval to construct the $80.5 million Medicine Bow Lateral, it underscored the recognition of coalbed methane as a major new natural gas supply source.

Drilling for coalbed methane has increased significantly in recent months, spurred on by a variety of unrelated factors including low oil prices.

Most industry officials agree that with oil prices below year-ago levels, coalbed methane drilling makes economic sense in today's environment.

"Independents are looking more at natural gas in general because of [low] oil prices," said John Kelso, manager of investor relations for Evergreen Resources Inc., a Denver-based company that drills exclusively for coalbed methane in southern Colorado's Raton Basin.

Coalbed methane drilling is attractive to independents, in particular, because drillsites are small and drilling costs are lower than conventional, deep exploratory wells. One analyst estimates that a coalbed methane well can be drilled for less than $100,000.

Methane is formed in coal seams as part of the process that creates coal. The Energy Information Administration estimates that coalbed methane reserves continued to grow faster than conventional natural gas reserves, accounting for about 7% of year-end 1997 proved gas reserves. Coalbed methane production, which is now more than 5% of the U.S. total, also increased faster.

Similar to the rise in deep-water exploration, where operators now understand how to efficiently drill, complete and produce a well, the same trend is occurring in coalbed methane drilling. For example, Evergreen doesn't drill its wells using traditional methods. The company uses "air drilling," a method of rotary drilling that uses compressed air instead of conventional drilling muds.

In addition, because the Raton Basin consists of low-pressure reservoirs, the company uses larger than average pipe to efficiently transport the gas.

"More operators are figuring it out," Kelso said.

Over time, the industry has unlocked the best way to uncover coalbed methane, said Ron Wirth, director of investor relations for Western Gas Resources Inc.

He agrees that the current low-price environment for oil makes drilling for gas more attractive. However, the process of generating a productive coalbed methane prospect can't be accomplished by quickly drilling a few wells. In many cases, it takes dozens of shallow wells in a project area to produce profitable results.

Coalbed Methane Big in Alabama

Dennis Lathem, executive director of the Coalbed Methane Association of Alabama, said coalbed methane gas accounts for 26% of Alabama's overall natural gas production. Production of this "nonconventional fuel" continues to rise in Alabama, he said, because operators have "gotten a handle on costs and technology to drill these wells."

He added, "Companies have really concentrated on being as efficient as possible."

Coalbed methane drillers also have been getting support from two other sources: the federal government and the Environmental Protection Agency (EPA).

In late October, a law was passed that freed up acreage in the Powder River Basin. Certain rights to coalbed methane were placed in question as the result of a case involving the Southern Ute Indian tribe and Amoco Production Co.

Western Gas and Barrett Resources Corp., exploration

(continued on page 7)

MAJOR MARKET PRICES

December 7, 1998
($/MMBtu)

	This Week	Weekly Change	Bid Week for December
Chicago City Gate	1.80	-0.25	2.27
New York City Gate	1.87	-0.33	2.25
Houston Ship Channel	1.73	-0.27	2.03

NOTES: (1) Chicago City Gate prices are for gas delivered via interstate pipelines to Chicago's local distribution companies. (2) New York City Gate prices are for gas delivered to local distribution companies in New York City via interstate pipelines. (3) Houston Ship Channel prices are for gas delivered to the Houston Ship Channel. All prices are volume-weighted.

(continued from page 18)

ty production, royalty gas and some volumes for nonoperated interest-holders. However, with total marketed volumes in the United States of about 2.3 Bcfd, it still ranks among the top 25 gas suppliers. Exxon executives previously told *Natural Gas Week* that they preferred profit margin to volume.

Exxon also chose to withdraw from the midstream gas business in the United States at the same time other companies were building their holdings. It sold its Texas and Louisiana pipeline systems to Tejas Gas Corp., now part of Shell Oil Co., for about $450 million in 1993.

—Barbara Shook, Mark Smedley

GAS PRICE TRENDS
($/MMBtu)

	CALIFORNIA		ROCKY MTNS	NEW MEXICO	TEXAS				MID-CONT.	LOUISIANA			MID-WEST	APPA-LACHIA	SOUTH-EAST	NEW ENG.
	South	North			Gulf Coast Offshore	Gulf Coast Onshore	Central	West		Gulf Coast Offshore	Gulf Coast Onshore	Northern Louisiana				
1997 Average																
Inter (well)	—	—	1.76	2.09	2.27	2.29	2.22	2.26	2.24	2.33	2.35	2.37	—	2.50	2.34	—
Intra (well)	2.19	—	1.73	—	2.28	2.31	2.22	2.26	2.22	2.33	2.35	2.36	—	—	—	—
Dlvd (pipe)	2.41	1.95	1.88	2.26	2.34	2.37	2.31	2.31	2.34	2.41	2.42	2.44	2.39	2.61	2.49	2.85
Dlvd (util)	2.41	2.13	2.21	2.41	—	2.52	2.48	2.48	2.59	—	2.53	2.58	2.57	2.69	2.88	2.86
November 1997																
Inter (well)	—	—	2.62	2.79	3.02	3.03	2.97	2.98	3.01	3.09	3.13	3.13	—	3.36	3.11	—
Intra (well)	2.97	—	2.59	—	3.03	3.05	2.97	2.98	2.99	3.09	3.16	3.12	—	—	—	—
Dlvd (pipe)	3.19	2.69	2.74	2.96	3.09	3.11	3.06	3.06	3.11	3.17	3.20	3.20	3.19	3.47	3.26	3.66
Dlvd (util)	3.19	2.84	3.07	3.11	—	3.26	3.23	3.23	3.36	—	3.27	3.24	3.48	3.55	3.65	3.72
First Quarter 1998																
Inter (well)	—	—	1.78	1.84	1.98	2.04	1.93	1.98	2.00	2.07	2.09	2.10	—	2.20	2.10	—
Intra (well)	2.05	—	1.75	—	1.99	2.06	1.93	1.98	1.98	2.07	2.09	2.09	—	—	—	—
Dlvd (pipe)	2.27	1.96	1.90	2.01	2.05	2.12	2.02	2.02	2.10	2.15	2.16	2.17	2.14	2.31	2.30	2.53
Dlvd (util)	2.27	2.13	2.23	2.16	—	2.27	2.19	2.19	2.35	—	2.27	2.31	2.24	2.39	2.65	2.64
Second Quarter 1998																
Inter (well)	—	—	1.71	1.77	2.06	2.13	2.01	2.05	2.06	2.15	2.16	2.20	—	2.30	2.13	—
Intra (well)	2.04	—	1.68	—	2.07	2.15	2.01	2.05	2.04	2.15	2.16	2.19	—	—	—	—
Dlvd (pipe)	2.26	1.91	1.83	1.94	2.13	2.21	2.10	2.10	2.16	2.23	2.23	2.27	2.17	2.41	2.28	2.49
Dlvd (util)	2.26	2.09	2.16	2.09	—	2.36	2.27	2.27	2.41	—	2.35	2.41	2.35	2.49	2.70	2.51
Third Quarter 1998																
Inter (well)	—	—	1.57	1.64	1.82	1.92	1.85	1.90	1.83	1.93	1.93	1.97	—	2.05	1.90	—
Intra (well)	2.05	—	1.54	—	1.81	1.94	1.85	1.90	1.81	1.93	1.93	1.96	—	—	—	—
Dlvd (pipe)	2.27	1.96	1.69	1.81	1.88	2.00	1.94	1.94	1.93	2.01	2.00	2.04	1.95	2.16	2.05	2.25
Dlvd (util)	2.27	2.13	2.02	1.96	—	2.15	2.11	2.11	2.18	—	2.11	2.18	2.06	2.24	2.47	2.28
October 1998																
Inter (well)	—	—	1.62	1.55	1.77	1.86	1.79	1.81	1.77	1.87	1.89	1.91	—	2.05	1.87	—
Intra (well)	1.97	—	1.59	—	1.78	1.88	1.79	1.81	1.79	1.87	1.89	1.90	—	—	—	—
Dlvd (pipe)	2.19	1.99	1.74	1.72	1.84	1.94	1.88	1.88	1.89	1.95	1.96	1.98	1.93	2.16	2.04	2.22
Dlvd (util)	2.19	2.10	2.07	1.87	—	2.09	2.05	2.05	2.14	—	2.06	2.12	2.12	2.24	2.46	2.25
November 1998																
Inter (well)	—	—	1.77	1.77	1.88	1.94	1.85	1.92	1.89	1.97	1.98	2.01	—	2.19	1.95	—
Intra (well)	2.20	—	1.74	—	1.89	1.96	1.85	1.92	1.87	1.97	1.98	2.00	—	—	—	—
Dlvd (pipe)	2.42	2.27	1.89	1.94	1.95	2.02	1.94	1.94	1.99	2.05	2.05	2.08	2.04	2.30	2.10	2.33
Dlvd (util)	2.42	2.36	2.22	2.09	—	2.17	2.11	2.11	2.24	—	2.16	2.22	2.19	2.38	2.51	2.35
December 7, 1998																
Inter (well)	—	—	1.32	1.38	1.56	1.43	1.43	1.37	1.53	1.39	1.34	1.48	—	1.52	1.40	—
Intra (well)	1.74	—	1.29	—	1.57	1.45	1.43	1.37	1.51	1.39	1.34	1.47	—	—	—	—
Dlvd (pipe)	1.94	1.77	1.44	1.55	1.63	1.51	1.52	1.44	1.63	1.46	1.41	1.55	1.61	1.63	1.55	1.87
Dlvd (util)	1.94	1.85	1.77	1.70	—	1.66	1.69	1.52	1.88	—	1.52	1.69	1.80	1.71	2.03	2.05

NOTES: (1) Inter = Interstate Intra = Intrastate Well = Wellhead Dlvd = Delivered Pipe = Pipeline Util = Utility (2) This table presents historical data from the Gas Price Report. (3) R = Revised. (4) Mid-Cont. = Mid-Continent New Eng. = New England (5) Since Jan. 3, 1994, California prices have been divided into North to reflect gas delivered from Pacific Gas Transmission Co. to northern California and South to reflect gas delivered to southern California via the Transwestern Pipeline Co., El Paso Natural Gas Co. and Kern River Gas Transmission pipeline systems. Previous reporting for the state concentrated on southern California; thus, the historical prices in the South column properly reflect trading for southern California. *Natural Gas Week* has no similar history of prices for northern California. (6) All prices are volume-weighted

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Telecom Involvement Continues; Catalytica, GE Advance Deal

Energy company investment in high-tech communications continues to increase as those firms are beginning to see positive effects on their bottom lines.

Last week, Williams Companies Inc. said it purchased Intersys Mexico, a provider of network design and implementation services for business across Mexico for an undisclosed amount.

With that acquisition, Williams Communications Solutions L.L.C. now has complete North American coverage for those services.

Also, Questar InfoComm Inc. — a subsidiary of Questar Corp. — has invested $5 million in ParkerVision Inc. to fund development of new communication systems for monitoring gas pipeline pressures and volumes and operating flow-control valves, using ParkerVision's patented wireless radio technology.

ParkerVision, headquartered in Jacksonville, Fla., designs and develops wireless technology audiovisual products. It has patents pending on its Universal Direct Conversion Receiver radio technology, also known as Direct2Data or D2D, which company officials claim could significantly reduce the cost and power consumption of wireless communication systems.

That new technology has the potential to replace current radio receivers in a wide variety of applications, including electric and natural gas utility meter reading, cellular telephones, home security systems, pagers and others, officials said.

Independent consultants hired by Questar confirmed that D2D is capable of being applied to a wide range of wireless devices from low-speed data and voice transmission to high-speed applications.

Questar InfoComm provides information technology support for Questar Corp. affiliates engaged in energy development, transportation and distribution. "Technologies such as D2D that could potentially improve the efficiency and performance of these communication systems would be of interest to Questar and other energy companies," said Clyde M. Heiner, president and CEO of that subsidiary.

Questar InfoComm also is exploring possible joint ventures with ParkerVision to use D2D technology in other applications such as home-security systems and wireless computer networks. Questar may also provide some funding for the joint product development effort, officials said.

* * *

Catalytica Combustion Systems Inc. and GE Power Systems said they will collaborate to accelerate commercialization of Catalytica's Xonon pollution prevention technology in GE's gas turbines.

GAS PRICE REPORT

($/MMBtu—Spot)

December 7, 1998

	Interstate Wellhead		*Intrastate Wellhead*		*Delivered To Pipeline*		*Delivered To Utility*	
	This Week	Bid Week for Dec	This Week	Bid Week for Dec	This Week	Bid Week for Dec	This Week	Bid Week for Dec
CALIFORNIA[1]								
South	—		1.74	2.06	1.94	2.26	1.94	2.26
North	—		—		1.77	2.16	1.85	2.20
ROCKY MOUNTAINS	1.32	1.87	1.29	1.84	1.44	1.99	1.77	2.32
NEW MEXICO	1.38	1.81	—		1.55	1.98	1.70	2.13
TEXAS								
Gulf Coast, Offshore	1.56	1.85	1.57	1.86	1.63	1.92	—	
Gulf Coast, Onshore	1.43	1.92	1.45	1.94	1.51	2.00	1.66	2.15
Central	1.43	1.86	1.43	1.86	1.52	1.95	1.69	2.12
West	1.37	1.93	1.37	1.93	1.44	2.00	1.52	2.08
MID-CONTINENT	1.53	1.87	1.51	1.83	1.63	2.07	1.88	2.18
LOUISIANA								
Gulf Coast, Offshore	1.39	1.99	1.39	1.99	1.46	2.06	—	
Gulf Coast, Onshore	1.34	2.02	1.34	2.02	1.41	2.09	1.52	2.24
North	1.48	2.02	1.47	2.01	1.55	2.09	1.69	2.23
MIDWEST	—		—		1.61	2.13	1.80	2.27
APPALACHIA	1.52	2.22	—		1.63	2.33	1.71	2.42
SOUTHEAST	1.40	2.03	—		1.55	2.18	2.03	2.59
NEW ENGLAND	—		—		1.87	2.25	2.05	2.28

NOTES: *Spot* refers to contract durations of less than 12 months. All prices are volume-weighted averages of the most recently reported gas sales contracts and price renegotiations within periods of less than 12 months. (1) *California South* delivered-to-pipeline and delivered-to-utility prices represent gas delivered to the southern California border and to Wheeler Ridge, Calif., a gate station for Southern California Gas Co. *California North* delivered-to-pipeline prices represent gas that was delivered on Pacific Gas Transmission Co.'s system to Pacific Gas & Electric Co.'s (PG&E) Line 400 at Malin, Ore. *California North* delivered-to-utility prices represent gas delivered to PG&E's system at both northern and southern points, including Malin, Ore.; Daggett, Calif.; and Topock, Ariz., and can include prices for gas produced in California. R=Revised. Due to a computer error, this figure was incorrectly reported in earlier editions.

This definitive agreement follows a previous preliminary announcement of the partnership (NGW, 6-23-97, p.24), and will be applied specifically to GE's E-class and F-class turbines used in power generation and mechanical drive applications, the companies said.

The Xonon system essentially eliminates the formation of nitrogen oxide (NO_x) emissions in gas turbines without affecting the turbine's operating performance.

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The *Natural Gas Week* composite spot wellhead this week is $1.40/MMBtu, 46¢ less than last week, and 92¢ less than the Dec. 8, 1997, average. The spot delivered-to-pipeline price this week is $1.52/MMBtu, 46¢ less than last week, and 91¢ less than last year's corresponding average.

—Sam Fletcher, Scott C. Speaker